IN THE CLAIMS

Please cancel claims 5-7 and 14-15, and add new claims 21-28.

1. (Currently Amended) A vehicle drive system comprising:

a differential assembly;

a planetary gear box operably coupled to said differential assembly, said planetary gear box including a first drive member and a second drive member;

a first power source operably coupled to said first drive member to provide a first gear ratio reduction; and

a second power source operably coupled to said second drive member to provide a second gear ratio reduction different than said first gear ratio reduction wherein said first and said second power sources selectively drive said first and said second drive members together to generate a variable gear ratio under predetermined conditions and wherein said first and said second power sources each comprise one of a hydraulic drive motor and an electric drive motor.

2. (Currently Amended) The vehicle drive system of claim 1 wherein said first and said second power sources operate independently from each other.

3. (Original) The vehicle drive system of claim 2 wherein said first gear ratio reduction is higher than said second gear ratio reduction and wherein under predetermined conditions said first drive member comprises a sole drive member and said first power source operates to

generate a high output torque via said first gear ratio reduction by driving said first drive member.

4. (Original) The vehicle drive system of claim 2 wherein said second gear ratio reduction is lower than said first gear ratio reduction and wherein under predetermined conditions said second drive member comprises a sole drive member and said second power source operates to generate a high output speed via said second gear ratio reduction by driving said second drive member.

5-7. (Cancelled)

8. (Currently Amended) The vehicle drive system of claim ~~7~~ 22 including an input operably coupled to said differential assembly and driven by said planet carrier.

9. (Original) The vehicle drive system of claim 8 wherein said input comprises a pinion gear directly driven by said planet carrier and a second ring gear operably coupled to said differential assembly and driven by said pinion gear.

10. (Original) The vehicle drive system of claim 9 wherein said first power source directly drives said sun gear.

11. (Original) The vehicle drive system of claim 9 including an output gear driven by said second power source wherein said output gear drives said ring gear.

12. (Currently Amended) The vehicle drive system of claim ~~7~~ 22 wherein said planet carrier directly drives said differential assembly.

13. (Currently Amended) ~~The vehicle drive system of claim 12~~ A vehicle drive system comprising:

a differential assembly;

a planetary gear box operably coupled to said differential assembly, said planetary gear box including a first drive member, a second drive member, and a driven member that is driven by both said first and said second drive members;

said planetary gear box including a sun gear, a plurality of planet gears in meshing engagement with said sun gear, a planet carrier supporting said plurality of planet gears, and a ring gear in meshing engagement with said plurality of planet gears;

a first power source operably coupled to said first drive member to provide a first gear ratio reduction; and

a second power source operably coupled to said second drive member to provide a second gear ratio reduction different than said first gear ratio reduction wherein said first and said second power sources selectively drive said first and said second drive members together to generate a variable gear ratio under predetermined conditions wherein said first drive member comprises

said sun gear, said second drive member comprises said ring gear, and said driven member comprises said planet carrier; and

wherein said planet carrier directly drives said differential assembly, said differential assembly ~~includes~~ including a differential housing that supports a plurality of differential gears ~~and wherein~~ with said planet carrier ~~is~~ being formed as part of said differential housing.

14-15. (Cancelled)

16. (Currently Amended) The vehicle drive system of claim 1 wherein said differential assembly is operably coupled to drive first and second axle shafts about a lateral axis of rotation and wherein said first and said second power sources include first and second output shafts rotating about first and second longitudinal axes of rotation that are transverse to said lateral axis of rotation.

17. (Currently Amended) The vehicle drive system of claim 1 wherein said differential assembly is operably coupled to drive first and second axle shafts about a lateral axle axis of rotation and wherein said first and second power sources include first and second output shafts rotating about first and said second lateral motor axes of rotation that are parallel to and spaced apart from said lateral axle axis of rotation.

18. (Currently Amended) A vehicle drive system comprising:

first and second axle shafts operably coupled to drive first and second laterally spaced wheel assemblies about a lateral axis of rotation;

a differential assembly operably coupled to drive said first and said second axle shafts;

a single planetary gear box operably coupled to drive said differential assembly, said single planetary gear box including a sun gear, a plurality of planet gears in meshing engagement with said sun gear, a planet carrier supporting said plurality of planet gears, and a ring gear in meshing engagement with said plurality of planet gears;

a first power source operably coupled to drive said sun gear to provide a high gear ratio reduction, said first power source comprising one of a hydraulic drive motor and an electric drive motor; and

a second power source operably coupled to drive said ring gear to provide a low gear ratio reduction, said second power source comprising one of a hydraulic drive motor and an electric drive motor, wherein said first and said second power sources simultaneously drive said sun gear and said ring gear to generate a variable gear ratio under predetermined conditions.

19. (Currently Amended) The vehicle drive system of claim 18 wherein said planet carrier drives said differential assembly and is driven by said sun gear and said ring gear via said plurality of planet gears.

20. (Currently Amended) A method for powering a vehicle drive system comprising the steps of:

(a) providing a drive axle assembly including a center differential operably coupled to drive first and second axle shafts, and providing a planetary gear box operably coupled to the center differential and including a first drive input member, a second drive input member different than the first drive input member; and an output member driven by both the first and the second drive input members;

(b) driving the first drive input member with a first power source to provide a first gear ratio reduction;

(c) driving the second drive input member with a second power source different than the first power source to provide a second gear ratio reduction different than the first gear ratio reduction wherein the first and second power sources each comprise one of a hydraulic drive motor and an electric drive motor; and

(d) simultaneously powering both the first and the second power sources under predetermined conditions to provide a variable gear ratio input to the center differential via the output member.

21. (New) The method of claim 20 wherein the planetary gear box comprises a sun gear, a plurality of planet gears in meshing engagement with the sun gear, a planet carrier supporting the plurality of planet gears, and a ring gear in meshing engagement with the plurality of planet gears, wherein the first drive member comprises the sun gear, the second drive member comprises the ring gear, and the driven member comprises the planet carrier; and including the

step of coupling a clutch to the ring gear to prevent rotation of the ring gear under predetermined conditions.

22. (New) The vehicle drive system of claim 1 wherein said differential assembly is mounted within an axle housing and wherein said planetary gear box includes a sun gear, a plurality of planet gears in meshing engagement with said sun gear, a planet carrier supporting said plurality of planet gears, a ring gear in meshing engagement with said plurality of planet gears, and a gear housing substantially enclosing said sun gear, said planet carrier, said ring gear,and said plurality of planet gears, said gear housing being attached to the axle housing, wherein said sun gear comprises said first drive member, said ring gear comprises said second drive member, and said planet carrier comprises a driven member for driving said differential assembly, said driven member being driven by both said first and said second drive members.

23. (New) The vehicle drive system of claim 22 including a clutch coupled to said ring gear to prevent rotation of said ring gear under predetermined conditions.

24. (New) The vehicle drive system of claim 22 including an input gear set for driving said differential assembly, said input gear set including a pinion gear that is directly driven by said planet carrier.

25. (New) The vehicle drive system of claim 22 wherein said differential assembly includes a differential casing that houses a plurality of differential gears, said planet carrier being fixed to said differential casing.

26. (New) The vehicle drive system of claim 22 including a first drive gear in meshing engagement with said ring gear wherein said first power source includes a first output shaft that drives said sun gear and said second power source includes a second output shaft that drives said first drive gear.

27. (New) The vehicle drive system of claim 26 wherein said first output shaft directly drives said sun gear.

28. (New) The vehicle drive system of claim 26 including a second drive gear that drives an idler gear in meshing engagement with said sun gear wherein said first output shaft drives said second drive gear.